

## Community Groundwater Sanitary Survey Form

Date: \_\_\_\_\_

Date of last survey: \_\_\_\_\_

Inspector(s): \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

### **Utility Information**

PWSID: \_\_\_\_\_

Utility name: \_\_\_\_\_

Mailing address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Contact person: \_\_\_\_\_

Alternate contact: \_\_\_\_\_

Telephone: \_\_\_\_\_

Fax: \_\_\_\_\_

Other phone: \_\_\_\_\_

### **Service Connections**

Number of metered connections \_\_\_\_\_

Number of unmetered connections \_\_\_\_\_

Population \_\_\_\_\_

### **Operator Information**

Utility superintendent: \_\_\_\_\_

Operators: \_\_\_\_\_

Class:(circle one)      I      II      III      IV

\_\_\_\_\_

Class:(circle one)      I      II      III      IV

\_\_\_\_\_

Class:(circle one)      I      II      III      IV

\_\_\_\_\_

Class:(circle one)      I      II      III      IV

### **Production Capacity**

Average daily production (MGD) \_\_\_\_\_

Max. daily production(MGD) \_\_\_\_\_

Ave. daily production - winter (MGD) \_\_\_\_\_

Ave. daily production - summer (MGD) \_\_\_\_\_

Does the system have an operational master meter?

☐ yes

☐ no

List all communities served by the water system: \_\_\_\_\_




\_\_\_\_\_


### **Inspection Summary**

#### **Recommendations/requirements:**



1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

### Source and Pumping Information

	Name of Source	Well ID 	Yield (GPM)	Class  	Nearby contaminants
Source 1		<u>  </u> 01			
Source 2		<u>  </u> 02			
Source 3		<u>  </u> 03			
Source 4		<u>  </u> 04			
Source 5		<u>  </u> 05			

 Choose one of the following numeric codes for first digit of the well ID number.

- |                  |                   |                         |
|------------------|-------------------|-------------------------|
| 1. Bedrock well  | 2. Surficial Well | 3. Dug well/well points |
| 4. Surface water | 5. Purchased      | 6. Spring               |

  Source classified as either active, backup or emergency

### Wellhead Protection

Have plans been approved by geological services? \_\_\_\_\_

List contaminants within a 300' radius of well: \_\_\_\_\_

### Raw Water Pumping

Pump number	1	2	3	4	5
Name of source					
Pump capacity (GPM)					
Horsepower rating					
Type of pump					
Manufacturer					
Last service date					
Condition of pump					

### Finish Water Pumping

Pump number	1	2	3	4	5
Name of source					
Pump capacity (GPM)					
Horsepower rating					
Type of pump					
Manufacturer					
Last service date					
Condition of pump					

## **Chemicals**

Check all that apply.

- |                                               |                                              |                                          |                                                |
|-----------------------------------------------|----------------------------------------------|------------------------------------------|------------------------------------------------|
| <input type="checkbox"/> Calcium hypochlorite | <input type="checkbox"/> Sodium hydroxide    | <input type="checkbox"/> Chlorine gas    | <input type="checkbox"/> Sodium silicate       |
| <input type="checkbox"/> Sodium hypochlorite  | <input type="checkbox"/> Zinc orthophosphate | <input type="checkbox"/> Sodium fluoride | <input type="checkbox"/> Silly acid (fluoride) |
| <input type="checkbox"/> Other                |                                              |                                          |                                                |

Draw a schematic diagram from source to distribution and label chemical feed points using numbers below.

## **Chemical Injection Methods**

Pump #	1	2	3	4	5	6
Chemical						
Feed Type						
Make						

Are chemicals injected at a 45° angle from the bottom of the pipes? ☐ yes ☐ no

Does each chemical used have a separate spill containment system? ☐ yes ☐ no

Are all chemicals paced to flow? ☐ yes ☐ no

Are MSDS sheets present for each chemical? \_\_\_\_\_

Is the spill containment system adequate? \_\_\_\_\_

Are the chemical feed lines properly laid out? \_\_\_\_\_

Recommendations: \_\_\_\_\_

\_\_\_\_\_

### **On-site Storage**

Depth (ft): \_\_\_\_\_ Width (ft): \_\_\_\_\_ Length (ft): \_\_\_\_\_

Volume per unit: \_\_\_\_\_ Number of units installed: \_\_\_\_\_

Is on-site storage protected from chemical spills? \_\_\_\_\_

Can on-site storage be bypassed for cleaning/maintenance? \_\_\_\_\_

Is storage overflow screened properly? \_\_\_\_\_

### **Disinfection**

Disinfectant used: \_\_\_\_\_ NSF approved? \_\_\_\_\_

Monthly reports submitted to DWP? \_\_\_\_\_

Chemical containment/safety equipment acceptable? \_\_\_\_\_

Is there a redundant chemical feed pump on site? \_\_\_\_\_

Does the system monitor disinfectant with a continuous, alarmed analyzer? \_\_\_\_\_

### **Air Stripping**

Circle one of the following technologies: *Lowry*      *Shallow Tray*      *Packed Tower*      *MSDBA*      *Spray*

Manufacturer: \_\_\_\_\_

Is post aeration water disinfected? (*yes or no*) \_\_\_\_\_

Principle reason for air stripping: \_\_\_\_\_

### **Ion exchange**

Purpose (softening, contaminant removal, etc.) \_\_\_\_\_

Contaminant(s) removed: \_\_\_\_\_

Resin type: \_\_\_\_\_

Is raw/treated water routinely monitored to determine historic removal efficiency? \_\_\_\_\_

How often is the unit serviced? \_\_\_\_\_

### **Other Treatment**

Name: \_\_\_\_\_

Purpose: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Design parameter: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Recommendations: \_\_\_\_\_

\_\_\_\_\_

## Distribution System

What and where is the low pressure point in the distribution system? \_\_\_\_\_

How many limited service agreements does the system have? \_\_\_\_\_

Does the system have any pressure boosting stations? \_\_\_\_\_

Are plans of the water distribution system available and current? \_\_\_\_\_

Piping Material	Length	% of Total
Plastic		
Cast iron		
Ductile iron		
Concrete		
Galvanized Steel		
Asbestos Cement		
Other		
Total length		

How often is the system flushed?                      spring                      fall                      both

Are dead ends in the system are monitored for contamination? \_\_\_\_\_

How many hydrants does the system own? \_\_\_\_\_ Are they all plugged? \_\_\_\_\_

How many people are employed for distribution system maintenance? \_\_\_\_\_

Is the distribution maintenance crew appropriate for the size of the network?    ☐ yes                      ☐ no

Do distribution personnel have the proper equipment?                      ☐ yes                      ☐ no

Are valves regularly exercised?                      ☐ yes                      ☐ no

Does the system have a capital improvement plan?    ☐ yes                      ☐ no

Are plastic lines covered with a tracer wire for easy location?    ☐ yes                      ☐ no

Does the system have an active leak detection program?    ☐ yes                      ☐ no

## **Cross Connection Control**

Does the utility have a cross connection control program? (yes or no)                      Examine the written program.

Are approved backflow prevention devices installed at the following locations?

Nursing Homes	Hospitals	Dentists' Offices	Doctors' Offices
Manufacturing Plants	Auto Garages	Water Treatment Plants	Waste Treatment Plant
Fire Stations	other areas _____		

How often are these devices checked? \_\_\_\_\_

Are approved double-check assemblies installed in all new residential services? (yes/no) Type: \_\_\_\_\_

Recommendations: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## **Storage Tanks**

Name of storage tank:				
Location of tank				
Volume of storage (gallons)				
Type of tank				
Manufacturer				
Date of construction				
Date of last inspection				
Is the site protected from vandalism?				
Can the tank be isolated from the system?				
Are overflows/drains screened properly?				
General tank condition: (good, bad, ugly)				

How many days of storage does the system have? \_\_\_\_\_ days

Storage tank notes: \_\_\_\_\_

## **Sampling**

### **Total Coliform Rule:**

How often are bacteriological samples taken? \_\_\_\_\_

How often should samples be taken, based on population data? \_\_\_\_\_

Does the D.W.P. have a sampling site plan on file? \_\_\_\_\_

### Summary of PUC regulations, Chapter 62 re. Meter Testing Frequency

Unless permitted otherwise a water company shall adopt the schedule shown below for routine testing of meters:"

<u>Nominal Size of Meter</u>	<u>Years</u>	<u>Cubic Feet</u>
5/8"	8	100,000
3/4"	8	150,000
1"	8	300,000
1 1/2"	6	-
2"	6	-
3"	4 Field	-
4"	2 Field	-
6"	1 Field	-

### TC monitoring frequency for community water systems

Population range	# of samples per month
25	1000
1001	2500
2501	3300
3301	4100
4101	4900
4901	5800
5801	6700
6701	7600
7601	8500
8501	12900
12901	17200
17201	21500